

GHS Classification

ID296

CAS 97-17-6

Physical Hazards

O-2,4-Dichlorophenyl O,O-diethyl phosphorothioate; Dichlofenthion; ECP

Date Classified: Dec. 19, 2006 (Environmental Hazards: Mar. 31, 2006)

Reference Manual: GHS Classification Manual (Feb. 10, 2006)

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Explosives	Not applicable	—	—	—	Containing no chemical groups with explosive properties
2 Flammable gases	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
5 Gases under pressure	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
6 Flammable liquids	Classification not possible	—	—	—	No data available
7 Flammable solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Classification not possible	—	—	—	No data available
10 Pyrophoric solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
11 Self-heating substances and mixtures	Classification not possible	—	—	—	Test methods applicable to liquid substances are not available (test temperature: 140degC).
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	—	—	—	Stable to water (water solubility: 0.853mg/L (20degC) (Agricultural Chemical Registration Data))
13 Oxidizing liquids	Classification not possible	—	—	—	Classification not possible due to lack of data, though being organic compounds containing oxygen (but not chlorine and fluorine) bound to the elements other than carbon and hydrogen
14 Oxidizing solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
15 Organic peroxides	Not applicable	—	—	—	Organic compounds containing no "-O-O-" structure
16 Corrosive to metals	Classification not possible	—	—	—	Classification not possible due to lack of data.

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 3	Skull and crossbones	Danger	Toxic if swallowed	Based on the rat LD50 (oral route) value of 136mg/kg (Agricultural Chemical Registration Data (1973)).
1 Acute toxicity (dermal)	Category 3	Skull and crossbones	Danger	Toxic in contact with skin	Based on the mouse LD50 (dermal route) value of 296mg/kg (Agricultural Chemical Registration Data (1973)).
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is a liquid according to the GHS definition and inhalation of its gas is not expected.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	No data available
1 Acute toxicity (inhalation: dust, mist)	Category 4	Exclamation mark	Warning	Harmful if inhaled	Based on the rat LC50 (inhalation route) value of 1.75mg/L (Agricultural Chemical Registration Data (1994)).
2 Skin corrosion / irritation	Category 3	—	Warning	Causes mild skin irritation	Based on the description in the report on rabbit skin irritation tests: "Caused mild irritation which was fully reversible by Day 5" (Agricultural Chemical Registration Data (1974)).
3 Serious eye damage / eye irritation	Category 2B	—	Warning	Causes eye irritation	Based on the description in the report on rabbit eye irritation tests (Agricultural Chemical Registration Data (1974)): At 24 hours, treated animals exhibited chemosis in unwashed eyes, but the reactions cleared up by 72 hours.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible Skin sensitization: Category 1	(Respiratory sensitization) — (Skin sensitization) Exclamation mark	(Respiratory sensitization) — (Skin sensitization) Warning	(Respiratory sensitization) — (Skin sensitization) May cause an allergic skin reaction	Respiratory sensitization: No data available Skin sensitization: Based on the evidence of mild sensitization observed in guinea pig skin sensitization studies using the Maximization method (Agricultural Chemical Registration Data (2004)).
5 Germ cell mutagenicity	Not classified	—	—	—	Based on negative data on in vivo reverse mutation tests in vitro (Agricultural Chemical Registration Data (1977)), in vitro chromosome aberration tests (Agricultural Chemical Registration Data (1989)) and in vivo micronucleus tests on mouse bone marrow cells (Agricultural Chemical Registration Data (2004)).
6 Carcinogenicity	Not classified	—	—	—	There was no treatment-related evidence of tumor incidence observed in 18-month carcinogenicity studies in mice, reported in Agricultural Chemical Registration Data (1997).
7 Toxic to reproduction	Not classified	—	—	—	Based on no evidence of treatment-related effects on reproduction and offspring development in rat 3-generation reproduction studies (Agricultural Chemical Registration Data (1975)) and rabbit teratogenicity studies (Agricultural Chemical Registration Data (1974, 1988)).
8 Specific target organs/systemic toxicity following single exposure	Category 1 (nervous system)	Health hazard	Danger	Causes damage to organs (nervous system)	In rat single dose toxicity studies, clinical signs and symptoms including shivering, salivation, lacrimation, tachypnea, diarrhea, tremors, staggering gait, hypofunction, excessive chewing, writhing, hyporeflexia, short of breath and coma were reported (Agricultural Chemical Registration Data (1973)). These effects were observed at dosing levels within the guidance value ranges for Category 1.
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	—	—	—	In rat subacute toxicity studies, decreases in plasma/red blood cell/brain cholinesterase levels were found at dosing levels within the guidance value ranges for Category 1 (Agricultural Chemical Registration Data (1956)). However, classification is not possible since no evidence of other common symptoms and pathological findings was reported.
10 Aspiration hazard	Classification not possible	—	—	—	No data available

Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
11 Hazardous to the aquatic environment (acute)	Category 1	Environment	Warning	Very toxic to aquatic life	It was classified into Category 1 from 48 hours EC50=0.00012mg/L of the crustacea (Daphnia magna) (Agricultural Chemical Registration Data, 2004).
11 Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Since acute toxicity was Category 1 and there was no rapidly degrading (BIOWIN), and since there was bio-accumulation (log Kow=5.14 (PHYSPROP Database, 2005)), it was classified into Category 1.